

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

October 5, 2007

TO: K. Fortenberry, Technical Director
FROM: R. Quirk and W. Linzau, Hanford Site Representatives
SUBJECT: Activity Report for the Week Ending October 5, 2007

Tank Farms: The contractor drained the tank waste from the dilution hose, the suspected source of the spill above tank S-102 (see Hanford Activity report 7/27/07), into a drum and then moved the drum and hose outside the high radiation/high contamination area that was established after the spill. The work went smoothly as it was performed over a three-day period and no workers were contaminated. The extensive planning and mock-ups prepared the workers, support personnel including emergency management, and managers for the task. Radiation dose rate readings on the bottom of the drum indicate that there is dilute tank waste in the drum. Preliminary dose rate readings of the spill area after the hose was removed did not result in the anticipated dose rate reduction. Visual observation of the hose did not reveal any clear failure points. There was significant contractor management and Office of River Protection (ORP) presence in the pre-job briefings and in the field. Plans are being developed to remove additional externally contaminated equipment from the area as well as look for other potential sources for the spill before remediation efforts commence.

Waste Treatment Plant (WTP): ORP presented results from their individual assessments from the last quarter. The ORP construction oversight teams identified six findings from 93 documented surveillances and reviewed 1,472 field weld records and found only nine minor errors. ORP assessments were also done on the contractor's risk management, document control, and the confinement/off-gas system design, but these reviews produced no findings.

River Corridor Closure Project: The site rep observed mock-up training and field walkthroughs at the 618-7 Burial Ground and provided Richland Operations Office personnel and the contractor observations about potential weaknesses in the work practices. The project is targeting a start of operations later this month.

Near Miss Occurrence Report: The tank farms contractor submitted a Management Concern Occurrence Report due to a near miss involving a work cart that was blown off the top of an administrative building. The site rep notified the tank farms shift office when he heard an unusual noise on the roof above his office. Later the other site rep discovered the broken cart smashed on the sidewalk in a location where personnel normally gather during breaks. Fortunately, most of the building was empty because of a contractor "all hands" safety meeting being conducted in town. The cart was used as a work table during prior maintenance activities on the roof and blown off by winds that were gusting greater than 20 miles per hour. The cart had been up on the roof for an extended period of time but reportedly was usually secured after use. Inspection of the roof after the event revealed other loose debris, including chairs and lumber. Site contractors are conducting inspections looking for similar hazards.